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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,966	12/14/2004	Brian Daniel Doan	PU4754USW	3771
23347 7590 03/24/2008 GLAXOSMITHKLINE CORPORATE INTELLECTUAL PROPERTY, MAI B475 FIVE MOORE DR., PO BOX 13398 RESEARCH TRIANGLE PARK, NC 27709-3398				
EXAMINER CHANDRAKUMAR, NIZAL S				
ART UNIT 1625		PAPER NUMBER		
NOTIFICATION DATE 03/24/2008		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/517,966

Applicant(s)

DOAN ET AL.

Examiner

NIZAL S. CHANDRAKUMAR

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1625

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-10, 12-16, 18, 19, 22 and 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 3, 5 - 10, and 12 - 16, 18, 19, 22, and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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DETAILED ACTION

Applicants response filed 02/21/2008 is acknowledged.

Applicants amended claims.

Claims 4, 11, 17, 20, 21, and 24 - 29 are cancelled

Claims 1 - 3, 5 - 10, and 12 - 16, 18, 19, 22, and 23 are currently pending.

Response to Applicants Remarks:

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 - 3, 5 - 10, and 12 - 16, 18, 19, 22, and 23 remain rejected as being unpatentable over claims of application No. 10/560500. Applicants state that this rejection may be obviated by the filing of a terminal disclaimer.

The rejection of 1 - 3, 5 - 10, and 12 - 16, 18, 19, 22, and 23 on the ground of nonstatutory obvious-type double patenting as being unpatentable over claims 12 of US 7145024 is maintained for reasons of record.

Applicants argue that because

1. the amendment of claim 3 eliminating the resolution step,
2. the nature of claims 7-10, 12, 14, 16 being directed to compounds and because

3. the resolution of claim 15 relates to brominated compound, the double patenting rejection should be withdrawn. This is not persuasive because, the (enzymatic) resolution method of the instant compounds and that provided for the compounds of the issued patent are the same. Though, academic teachings are found on page 19, last paragraph referring to other possible ways to resolve racemic mixtures, the only enabling disclosure found in the instant case for the instantly claimed compounds, is the enzymatic resolution method as taught in the issued patent. As such, the rejection is maintained.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The previously presented rejection of claims 1 - 3, 5 - 10, and 12 - 16, 18, 19, 22, and 23 under 35 U.S.C. 112 second paragraph is maintained.

Applicants argue that the term C6-14 aryl is defined in the specification on page 9 and the term C6-14 aryl is a commonly used in patent applications. As such the meaning of the term C6-14 aryl is clear. This is not persuasive. Each application is examined on its merits. The term C6-14 aryl includes a C7 aryl. A C7 aromatic is a tropylium ion (in accordance with the Huckel rule for aromaticity). Thus if this limitation of C7 aryl is intended, then this would mean that compound (XII) is a ionic. Given that no counter ion is shown in the formula for (XII), the definition is vague and indefinite. Likewise, a C8 would be anti-aromatic. As to the definition for the term C6-14 aryl found on page 9, while phenyl and anthracenyl relate to aryl groups, indanyl and 'the like' are not art-recognized to be aryl. Applicant is reminded that potential 35 U.S.C. 112 second paragraph and 35 U.S.C. 112 first paragraph (enablement) requirements are indicated if such uncommon groups are part of the claim limitations. It is suggested that the limitation is defined as C6, C10 or C14 aryl.

In the previous office action, the Examiner indicated many missing steps in claims including 4, 6, 11. This was illustrated for claims 13. The rejection is maintained for the following reasons, shown now for claim 6:

In claim 6, the starting material for step c) is a bromo-compound, but it is unclear how, a reagent such as iodine monochloride (in the prior) step b) could provide a bromo compound. Further, according to step d), resolving compound (XIV) forms compound (XIX). Thus a racemic, diastereomeric mixture of bromo compounds by 'resolution' has become a non-bromo compound, that is, a chemical transformation has occurred without the use of any chemical reagent. Further, such a transformation would require chiral reduction reactions such as asymmetric hydrogenation, an enabling disclosure of which is not found in the specification. Claim 6, also recites (step e)) that 'reduction and deprotection' of an acetate forms the corresponding alcohol. It is unclear what is intended in this step; 'reduction or deprotection' is suggested.

Likewise, as previously presented, similar issues are present in claim 13.

Further, in claim 15, step b) implies an asymmetric bromo-etherification process and the language of step c) is inconsistent with the structure shown for (XX). Resolution is anticipated to provide purer isomers. It is unclear how, resolution could result in racemization (needed for the formation of diastereomers from stereochemically pure (XX)).

Applicant's amendments overcome part of the previously presented rejection. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIZAL S. CHANDRAKUMAR whose telephone number is (571)272-6202. The examiner can normally be reached on 8.30 AM - 4.30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres can be reached on 571 0272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nizal S. Chandrakumar

/D. Margaret Seaman/

Primary Examiner, Art Unit 1625